



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,197	03/29/2001	Winston W. Hodge	COAX 01.004	1233
48008	7590	12/14/2005	EXAMINER	
VIRTUAL LEGAL, P.C. MICHAEL A. KERR 3476 EXECUTIVE POINTE WAY, UNIT 16 CARSON CITY, NV 89706			LAMBRECHT, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,197

Applicant(s)

HODGE ET AL.

Examiner

Christopher M. Lambrecht

Art Unit

2611

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-40 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 11-16, 21-26, and 31-36 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,917,614 to Laubach et al. (hereinafter "Laubach").

Regarding claims 1, 11, 21, and 31, Laubach discloses a programmable downstream module (313, fig. 3; detail in fig. 4) configured to be communicatively coupled to a digital headend (103, figs. 1-3), comprising:

a bus interface (402, fig. 4) configured to be communicatively coupled to said digital headend (col. 13, ll. 54-58), said bus interface configured to receive a plurality of control data packets (*e.g.*, grant messages, col. 29, ll. 9-13) and a plurality of transport packets (col. 13, l. 61 - col. 14, l. 2), said plurality of transport packets comprising a plurality of video, TCP/IP, and voice transport packets communicated asynchronously (col. 6, ll. 38-49, col. 11, ll. 25-30, and col. 12, ll. 15-25; TCP, see col. 34, ll. 8-26);

a processor (404, fig. 4) operatively coupled to said bus interface, said processor configured to combine said plurality of transport packets (*i.e.*, into serial bit stream, col. 14, ll. 2-17); and

a programmable logic (412, fig. 4) operatively coupled to said processor, said programmable logic configured to generate a synchronous output for said plurality of packets (col. 14, ll. 32-49).

As to claims 2, 12, 22, and 32, Laubach discloses the programmable downstream module of claims 1, 11, 21, and 31, further comprising a downstream QAM modulator (408, fig. 4) configured to receive and modulate said synchronous output for downstream transmission, said downstream QAM modulator configured to generate a downstream modulator output (col. 14, ll. 12-17).

As to claims 3, 13, 23, and 33, Laubach discloses the programmable downstream module of claims 2, 12, 22, and 32, further comprising an upconverter (409, fig. 4) operatively coupled to said downstream modulator [408], said upconverter configured to generate a particular RF frequency output for said downstream modulator output (col. 14, ll. 13-17).

As to claims 4, 14, 24, and 34, Laubach discloses the programmable downstream module of claims 1, 11, 21, and 31, further comprising, a first memory module (406, fig. 4) operatively coupled to said processor [404, via 405], said first memory module configured to provide memory resources for said plurality of control data packets and said plurality of transport packets (*i.e.*, 406 stores encryption keys used for encrypting said plurality of packets, col. 14, ll. 5-12 [406 misprinted “408” in cited portion]).

As to claims 5, 15, 25, and 35, Laubach discloses the programmable downstream module of claims 4, 14, 24, and 34, further comprising a second memory module operatively coupled to said programmable logic [412], said second memory module configured to act as a buffer and store said plurality of transport packets and said plurality of control packets (buffering said plurality of transport packets—including memory thus for—is inherent where, *e.g.*, forward error correction processing is performed on said packets [see col. 14, ll. 10-15] as evidenced by delay resulting therefrom [col. 14, ll. 39-44]).

As to claims 6, 16, 26, and 36, Laubach discloses the programmable downstream module of claims 2, 12, 22, and 32 further comprising an encryption circuit (405, fig. 4) operatively coupled between said programmable logic [412] and said QAM modulator [408], said encryption circuit configured to encrypt said synchronous output (col. 14, ll. 2-12).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 7-10, 17-20, 27-30, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laubach in view of U.S. Patent No. 5,987,518 to Gotwald (hereinafter “Gotwald”).

Regarding claims 7, 17, 27, and 37, Laubach discloses the programmable downstream module of claims 1, 11, 21, and 31. Furthermore, Laubach discloses use of the MPEG-2 standard for digital video transport on the disclosed system as well as IP for Internet data and telephony (col. 6, ll. 38-49 and col. 41, l. 67 - col. 42, l. 10). However, Laubach fails to explicitly disclose said plurality of transport packets are a plurality of MPEG-2 transport packets.

In an analogous art, Gotwald discloses encapsulating received IP data packets in MPEG-2 transport packets (at 44, fig. 2, col. 4, ll. 28-38) for multiplexing with additional MPEG-2 streams (col. 4, ll. 42-54) in order to simplify delivery of Internet services in a cable television distribution system (col. 6, ll. 39-50).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the video, TCP/IP, and IP telephony data of Laubach as a plurality of MPEG-2 transport packets, as taught by Gotwald, for the benefit of simplifying delivery of the various services provided by the digital headend.

As to claims 8, 18, 28, and 38, Laubach and Gotwald together disclose the programmable downstream module of claims 7, 17, 27, and 37, but fail to explicitly disclose said processor is configured to perform bit-stuffing.

Official notice is taken of the fact that it is well known in the art to perform bit-stuffing when encapsulating data within fixed packet-length packets (*e.g.* MPEG-2 transport stream packets) in order to produce a standards-compliant packet stream.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Laubach and Gotwald such that said processor is configured to perform bit-stuffing, for the benefit of producing an MPEG-2 compliant transport stream.

As to claims 9, 19, 29, and 39, Laubach and Gotwald together disclose the programmable downstream module of claims 8, 18, 28, and 38 (see above) wherein said processor is configured to provide for insertion of control data into said plurality of MPEG-2 transport packets (see Gotwald, col. 5, l. 60 - col. 6, l. 8).

As to claims 10, 20, 30, and 40, Laubach and Gotwald together disclose the programmable downstream module of claims 9, 19, 29, and 39 wherein said processor is configured to perform byte insertions (*i.e.*, priority messages of at least 1 byte in length are inserted in the transport packets [Gotwald, col. 5, ll. 12-25]).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2611

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher M Lambrecht
Examiner
Art Unit 2611

CML



**HAITRAN
PRIMARY EXAMINER**